Siberix Report Writer for Silverlight

User's Guide

User's Guide for Siberix Report Writer for Silverlight 2.0

Contents

Overview

Siberix Report Writer for Silverlight is an advanced reporting solution for Silverlight 5.0 designed to create industry standard PDF and XPS[1] documents dynamically with API calls or from XML. It provides a variety of methods to format text, insert images, draw geometric figures and paths and allows to create complex layouts.

Top Features

- PDF and XPS publishing
- Easy to use API and XML format
- Multiple sections with individual formatting
- Headers, Footers, Decorations and Watermarks
- Automatic page flow
- Page numbering and Page breaks
- Hyperlinks and Bookmarks
- Grids, Lists, Trees, Groups and Flows
- Site containers to place elements by absolute positions
- Text formatting (Font size and color; Strikeout and Underline; Superscript and Subscript; Alignment; Intervals and Indentations)
- Images and Shapes
- Direct canvas drawing (Lines, Rectangles, Ellipses, Polylines, Polygons, Arcs, Chords and Pies; Path composition; Bezier curves and Splines; Pen styles, widths, colors, caps and joins; SolidColor, LinearGradient, RadialGradient and Texture brushes; Font metrics; Clipping areas; Translation, Rotation, Skew and other transformations)
- Data binding and Callback interface to combine XML and API calls

System Requirements

- Silverlight 5.0
- Minimum of 256 Mb of RAM (512 and more recommended)
- Memory requirements vary according to the nature of the project

1. To the best of our knowledge, Microsoft doesn't forbid third party companies to develop a product for the XPS document generation. However, according to the XML Paper Specification Patent License we have to provide the following notice for your information:

This product may incorporate intellectual property owned by Microsoft Corporation. The terms and conditions upon which Microsoft is licensing such intellectual property may be found at http://go.microsoft.com/fwlink/?LinkId=52369.

Installation

Siberix Report Writer for Silverlight doesn't require any installation. All you need to do is to reference the Siberix.ReportWriter.dll within your project.

Graphics

This namespace provides core drawing functionality.

Measuring

The default unit of measure for most of the elements described in this User's Guide is point (pt). You may find some useful expressions below.

- 1 pt = 1 / 72 inch
- 1 px = 1 / 96 inch - May vary for particular screen devices and modes
- 1 mm = 1 / 25.4 inch

You can also set any float property using an explicit unit of measure.

- Points (pt)
- Pixels (px)
- Twips (tw)
- Millimeters (mm)

Examples

```
[XML]

<Group Width="300 px" />
```

Colors

Colors are widely used across the report. Every time you create a pen or a brush you need to provide a reference to a color object. Siberix Report Writer for Silverlight allows to specify colors in two different ways: 1. You can create a new color providing Red, Green, Blue and Alpha byte values; 2. You can select a color by its name from a collection of predefined colors. To access the collection of predefined colors use properties of the Siberix.Graphics.Colors class.

AliceBlue	Chocolate	DarkOrchid	Fuchsia
AntiqueWhite	Coral	DarkRed	Gainsboro
Aqua	CornflowerBlue	DarkSalmon	GhostWhite
Aquamarine	Cornsilk	DarkSeaGreen	Gold
Azure	Crimson	DarkSlateBlue	Goldenrod
Beige	Cyan	DarkSlateGray	Gray
Bisque	DarkBlue	DarkTurquoise	Green
Black	DarkCyan	DarkViolet	GreenYellow
BlanchedAlmond	DarkGoldenrod	DeepPink	Honeydew
Blue	DarkGray	DeepSkyBlue	HotPink
BlueViolet	DarkGreen	DimGray	IndianRed
Brown	DarkKhaki	DodgerBlue	Indigo
BurlyWood	DarkMagenta	Firebrick	Ivory
CadetBlue	DarkOliveGreen	FloralWhite	Khaki
Chartreuse	DarkOrange	ForestGreen	Lavender

LavenderBlush	Maroon	OrangeRed	SeaShell
LawnGreen	MediumAquamarine	Orchid	Sienna
LemonChiffon	MediumBlue	PaleGoldenrod	Silver
LightBlue	MediumOrchid	PaleGreen	SkyBlue
LightCoral	MediumPurple	PaleTurquoise	SlateBlue
LightCyan	MediumSeaGreen	PaleVioletRed	SlateGray
LightGoldenrodYellow	MediumSlateBlue	PapayaWhip	Snow
LightGray	MediumSpringGreen	PeachPuff	SpringGreen
LightGreen	MediumTurquoise	Peru	SteelBlue
LightPink	MediumVioletRed	Pink	Tan
LightSalmon	MidnightBlue	Plum	Teal
LightSeaGreen	MintCream	PowderBlue	Thistle
LightSkyBlue	MistyRose	Purple	Tomato
LightSlateGray	Moccasin	Red	Turquoise
LightSteelBlue	NavajoWhite	RosyBrown	Violet
LightYellow	Navy	RoyalBlue	Wheat
Lime	OldLace	SaddleBrown	White
LimeGreen	Olive	Salmon	WhiteSmoke
Linen	OliveDrab	SandyBrown	Yellow
Magenta	Orange	SeaGreen	YellowGreen

Examples

```
[CS]
Siberix.Graphics.Color color1 = new Siberix.Graphics.Color(255, 0, 0);
Siberix.Graphics.Color color2 = new Siberix.Graphics.Color(50, 255, 0, 0);
Siberix.Graphics.Color color3 = Siberix.Graphics.Colors.Red;
[VB]
Dim color1 As Siberix.Graphics.Color = New Siberix.Graphics.Color(255, 0, 0)
Dim color2 As Siberix.Graphics.Color = New Siberix.Graphics.Color(50, 255, 0, 0)
Dim color3 As Siberix.Graphics.Color = Siberix.Graphics.Colors.Red
[XML]
Color="#FFFF0000"
Color="#32FF0000"
Color="Red"
```

Pens

Every time you draw a line or a curve you have to provide a reference to a pen object. Siberix Report Writer for Silverlight allows to set individual pen attributes including Color, Width, Style, Pattern, Cap, Join and MiterLimit.

```
<Pen
   Color="Color name | #AARRGGBB | #RRGGBB | #ARGB | #RGB"
```

```
    Width="Float value > 0"
    Style="Solid | Dash | DashDot | DashDotDot | Dot | Custom"
    Pattern="[Float value - Dash, Float value - Space ...]"
    Cap="Flat | Round | Square"
    Join="Miter | Round | Bevel"
    MiterLimit="Float value"
/>
```

Predefined collection

You may use a collection of predefined pens to ease the development within your code. To access the collection of predefined pens use properties of the Siberix.Graphics.Pens class.

Examples

```
[CS]

Siberix.Graphics.Pen pen1 = new Siberix.Graphics.Pen(Siberix.Graphics.Colors.Red);

Siberix.Graphics.Pen pen2 = new Siberix.Graphics.Pen(new Siberix.Graphics.Color(255, 0, 0), 2,
Siberix.Graphics.DashStyle.DashDot);

Siberix.Graphics.Pen pen3 = Siberix.Graphics.Pens.Red;

[VB]

Dim pen1 As Siberix.Graphics.Pen = New Siberix.Graphics.Pen(Siberix.Graphics.Colors.Red)

Dim pen2 As Siberix.Graphics.Pen = New Siberix.Graphics.Pen(New Siberix.Graphics.Color(255, 0, 0), 2,
Siberix.Graphics.DashStyle.DashDot)

Dim pen3 As Siberix.Graphics.Pen = Siberix.Graphics.Pens.Red

[XML]

Pen="Red"

Pen="Red, 2, Dash"

Pen="Red, 2, Dash, Round, Bevel, 5"

Pen.Color="Red"
Pen.Width="2"

<Pen Color="Red" />

<Pen Color="#FFFF0000" Width="2" Style="DashDot" />
```

Brushes

Siberix Report Writer for Silverlight provides several types of brushes including SolidColorBrush, LinearGradientBrush, RadialGradientBrush and TextureBrush to output text or to fill the interiors of graphical shapes and elements.

SolidColorBrush

```
<Brush
    Type="SolidColor" - You may omit this attribute for solid color brushes.
    Color="Color name | #AARRGGBB | #RRGGBB | #ARGB | #RGB"
/>
```

Predefined collection

You may use a collection of predefined brushes to ease the development within your code. To access the collection of predefined brushes use properties of the Siberix.Graphics.Brushes class.

Examples

```
[CS]

Siberix.Graphics.SolidColorBrush brush1 = new Siberix.Graphics.SolidColorBrush(Siberix.Graphics.Colors.Red);

Siberix.Graphics.SolidColorBrush brush2 = new Siberix.Graphics.SolidColorBrush(new Siberix.Graphics.Color(255, 0, 0));

Siberix.Graphics.Brush brush3 = Siberix.Graphics.Brushes.Red;

[VB]

Dim brush1 As Siberix.Graphics.SolidColorBrush = New Siberix.Graphics.SolidColorBrush(Siberix.Graphics.Colors.Red)

Dim brush2 As Siberix.Graphics.SolidColorBrush = New Siberix.Graphics.SolidColorBrush(New Siberix.Graphics.Color(255, 0, 0))

Dim brush3 As Siberix.Graphics.Brush = Siberix.Graphics.Brushes.Red

[XML]

Brush="Red"

Brush.Type="SolidColor"
Brush.Color="Red"

<Brush Type="SolidColor" Color="Red" />
```

LinearGradientBrush

```
<Brush
   Type="LinearGradient"
   StartColor="Color name | #AARRGGBB | #RRGGBB | #ARGB | #RGB"
   EndColor="Color name | #AARRGGBB | #RRGGBB | #ARGB | #RGB"
   Angle="Float value"
>
   <Blend> - This element is optional if StartColor and EndColor attributes are present.
      <Entry
         Color="Color name | #AARRGGBB | #RRGGBB | #ARGB | #RGB"
         Offset="Float value in range [0.0 ... 1.0]"
      />
      ...
   </Blend>
</Brush>
```

Examples

```
[CS]

Siberix.Graphics.LinearGradientBrush brush1 = new Siberix.Graphics.LinearGradientBrush(Siberix.Graphics.Colors.Red,
Siberix.Graphics.Colors.Yellow);

Siberix.Graphics.ColorBlend blend = new Siberix.Graphics.ColorBlend();
blend.Add(Siberix.Graphics.Colors.Red, 0);
blend.Add(Siberix.Graphics.Colors.Yellow, 0.5F);
blend.Add(Siberix.Graphics.Colors.Blue, 1);
```

```
Siberix.Graphics.LinearGradientBrush brush2 = new Siberix.Graphics.LinearGradientBrush(blend, 35);

[VB]

Dim brush1 As Siberix.Graphics.LinearGradientBrush = New Siberix.Graphics.LinearGradientBrush(Siberix.Graphics.Colors.Red,
Siberix.Graphics.Colors.Yellow)

Dim blend As Siberix.Graphics.ColorBlend = New Siberix.Graphics.ColorBlend()
blend.Add(Siberix.Graphics.Colors.Red, 0)
blend.Add(Siberix.Graphics.Colors.Yellow, 0.5F)
blend.Add(Siberix.Graphics.Colors.Blue, 1)

Dim brush2 As Siberix.Graphics.LinearGradientBrush = New Siberix.Graphics.LinearGradientBrush(blend, 35)

[XML]

Brush="Red Yellow"

Brush="Red Yellow 45"

Brush.Type="LinearGradient"
Brush.StartColor="Red"
Brush.EndColor="Yellow"
Brush.Angle="45"

<Brush Type="LinearGradient" StartColor="Red" EndColor="Yellow" />

<Brush Type="LinearGradient" StartColor="#FFFF0000" EndColor="#FFFFFF00" Angle="35" />

<Brush Type="LinearGradient" Angle="45">
   <Blend>
      <Entry Color="Red" Offset="0" />
      <Entry Color="Green" Offset="0.5" />
      <Entry Color="Yellow" Offset="1" />
   </Blend>
</Brush>
```

RadialGradientBrush

```
<Brush
   Type="RadialGradient"
   StartColor="Color name | #AARRGGBB | #RRGGBB | #ARGB | #RGB"
   EndColor="Color name | #AARRGGBB | #RRGGBB | #ARGB | #RGB"
   Angle="Float value"
>
   <Center
      X="Float value in range [0.0 ... 1.0]"
      Y="Float value in range [0.0 ... 1.0]"
   />
   <Radius
      X="Float value in range [0.0 ... 1.0]"
      Y="Float value in range [0.0 ... 1.0]"
   />
   <Focus
      X="Float value in range [0.0 ... 1.0]"
      Y="Float value in range [0.0 ... 1.0]"
   />
   <Blend> - This element is optional if StartColor and EndColor attributes are present.
      <Entry
```

```
        Color="Color name | #AARRGGBB"
        Offset="Float value in range [0.0 ... 1.0]"
      />
      ...
    </Blend>
</Brush>
```

Examples

[CS]

```
Siberix.Graphics.RadialGradientBrush brush1 = new Siberix.Graphics.RadialGradientBrush(Siberix.Graphics.Colors.Red,
Siberix.Graphics.Colors.Yellow);

Siberix.Graphics.ColorBlend blend = new Siberix.Graphics.ColorBlend();
blend.Add(Siberix.Graphics.Colors.Red, 0);
blend.Add(Siberix.Graphics.Colors.Yellow, 0.5F);
blend.Add(Siberix.Graphics.Colors.Blue, 1);

Siberix.Graphics.Point center = new Siberix.Graphics.Point(0.4F, 0.6F);
Siberix.Graphics.Point radius = new Siberix.Graphics.Point(0.8F, 0.4F);
Siberix.Graphics.Point focus = new Siberix.Graphics.Point(0.7F, 0.2F);

Siberix.Graphics.RadialGradientBrush brush2 = new Siberix.Graphics.RadialGradientBrush(blend, 35, center, radius, focus);
```

[VB]

```
Dim brush1 As Siberix.Graphics.RadialGradientBrush = New Siberix.Graphics.RadialGradientBrush(Siberix.Graphics.Colors.Red,
Siberix.Graphics.Colors.Yellow)

Dim blend As Siberix.Graphics.ColorBlend = New Siberix.Graphics.ColorBlend()
blend.Add(Siberix.Graphics.Colors.Red, 0)
blend.Add(Siberix.Graphics.Colors.Yellow, 0.5F)
blend.Add(Siberix.Graphics.Colors.Blue, 1)

Dim center As Siberix.Graphics.Point = New Siberix.Graphics.Point(0.4F, 0.6F)
Dim radius As Siberix.Graphics.Point = New Siberix.Graphics.Point(0.8F, 0.4F)
Dim focus As Siberix.Graphics.Point = New Siberix.Graphics.Point(0.7F, 0.2F)

Dim brush2 As Siberix.Graphics.RadialGradientBrush = New Siberix.Graphics.RadialGradientBrush(blend, 35, center, radius, focus)
```

[XML]

```
Brush.Type="RadialGradient"
Brush.StartColor="Red"
Brush.EndColor="Yellow"
Brush.Angle="45"
Brush.Center="0.4, 0.6"
Brush.Radius.X="0.4"
Brush.Radius.Y="0.6"

<Brush Type="RadialGradient" StartColor="Red" EndColor="Yellow" />

<Brush Type="RadialGradient" StartColor="#FFFF0000" EndColor="#FFFFFF00" Angle="35" />

<Brush Type="RadialGradient" Angle="45">
   <Center X="0.4" Y="0.6" />
   <Radius X="0.8" Y="0.4" />
   <Focus X="0.7" Y="0.2" />
   <Blend>
      <Entry Color="Red" Offset="0" />
      <Entry Color="Green" Offset="0.5" />
      <Entry Color="Yellow" Offset="1" />
   </Blend>
</Brush>
```

TextureBrush

```
<Brush
   Type="Texture"
   Source="Callback image source or reference to embedded image"
   Angle="Float value"
   Scale="Float value"
>
   <Offset
      X="Float value"
      Y="Float value"
   />
</Brush>
```

Examples

```
[CS]

Siberix.Graphics.Image image = new Siberix.Graphics.Image("image1");

Siberix.Graphics.TextureBrush brush = new Siberix.Graphics.TextureBrush(image);

[VB]

Dim image As Siberix.Graphics.Image = New Siberix.Graphics.Image("image1")

Dim brush As Siberix.Graphics.TextureBrush = New Siberix.Graphics.TextureBrush(image)

[XML]

Brush.Type="Texture"
Brush.Source="image1"
Brush.Angle="45"
Brush.Scale="0.5"
Brush.Offset.X="10"

<Brush Type="Texture" Source="image1" Angle="45" Scale="0.5" />
```

Fonts

Siberix Report Writer for Silverlight allows to output text using any valid True Type font. Please note that you are only allowed to use fonts that permit document embedding or you have a correspondent license from the creator of the font.

```
<Font
   Source="Callback font source or reference to embedded font"
   Size="Float value > 0"
   Subscript="True | False"
   Superscript="True | False" - Has priority over Subscript.
/>
```

Examples

```
[CS]

Siberix.Graphics.Font font = new Siberix.Graphics.Font(font stream, 12);

[VB]

Dim font As Siberix.Graphics.Font = New Siberix.Graphics.Font(font stream, 12)
```

```
[XML]

Font="font1, 12"

Font.Source="font1"
Font.Size="12"

<Font Source="font1" Size="12" Superscript="True" />
```

Images

You can use any type of raster images (BMP, JPG, GIF, TIFF, PNG, etc.) supported by .NET Framework 3.5 with the Siberix Report Writer for Silverlight. However, we would recommend to use JPG images for photographic pictures and GIF or PNG images to preserve color and alpha transparency.

Examples

```
[CS]

Siberix.Graphics.Image image = new Siberix.Graphics.Image("image1");

[VB]

Dim image As Siberix.Graphics.Image = New Siberix.Graphics.Image("image1")
```

Report

This is the root element in the Siberix Report Writer for Silverlight's Document Object Model (DOM). You start building your reports by creating an instance of the Siberix.Report.Report class or by defining the <Report> XML tag. Then you set info properties, define styles and continue with the creation of the layout of the document. Each report can contain multiple sections.

```
<Report>
   <Info />
   <Preferences />
   <Resources />
   <Styles />
   <Bookmarks />
   <Sections />
</Report>
```

Examples

[CS]

```
Siberix.Report.Report report = new Siberix.Report.Report();

report.Info.Title = "Example";
report.Info.Author = "Siberix Technologies, Canada";
report.Info.Creator = "Siberix Report Writer for Silverlight";
report.Info.Copyright = "© 2003-2012 Siberix Technologies, Canada";

Siberix.Report.Section.ISection section = report.AddSection();
section.Size = Siberix.Report.PageSize.Letter;
section.Orientation = Siberix.Report.Orientation.Landscape;
section.Spacings.All = 35;

Siberix.Report.Text.Style style1 = new Siberix.Report.Text.Style(new Siberix.Graphics.Font(font1, 12),
Siberix.Graphics.Brushes.Black);

Siberix.Report.Text.IText text = section.AddText();
text.Style = style1;
text.AddContent("Hello PDF");

report.Publish(output stream, Siberix.Report.FileFormat.PDF);
```

[VB]

```
Dim report As Siberix.Report.Report = New Siberix.Report.Report()

report.Info.Title = "Example"
report.Info.Author = "Siberix Technologies, Canada"
report.Info.Creator = "Siberix Report Writer for Silverlight"
report.Info.Copyright = "© 2003-2012 Siberix Technologies, Canada"

Dim section As Siberix.Report.Section.ISection = report.AddSection()
section.Size = Siberix.Report.PageSize.Letter
section.Orientation = Siberix.Report.Orientation.Landscape
section.Spacings.All = 35

Dim style1 As Siberix.Report.Text.Style = New Siberix.Report.Text.Style(New Siberix.Graphics.Font(font1, 12),
Siberix.Graphics.Brushes.Black)

Dim text As Siberix.Report.Text.IText = section.AddText()
text.Style = style1
text.AddContent("Hello PDF")

report.Publish(output stream, Siberix.Report.FileFormat.PDF)
```

```
[XML]

<Report>
   <Info Title="Example" Author="Siberix Technologies, Canada" Creator="Siberix Report Writer for Silverlight" Copyright="©
2003-2012 Siberix Technologies, Canada" />
   <Styles>
      <Style Id="Style1">
         <Font Source="font1" Size="12" />
         <Brush Color="Black" />
      </Style>
   </Styles>
   <Sections>
      <Section Size="Letter" Orientation="Landscape" Spacings="35">
         <Text Style="Style1">Hello PDF</Text>
      </Section>
   </Sections>
</Report>
```

Info

This element represents a set of properties containing general information about the report including Title, Author, Keywords, etc. This data can be used to organize either original XML reports or output documents.

```
<Info
   Title="String value"
   Subject="String value"
   Author="String value"
   Manager="String value"
   Company="String value"
   Creator="String value"
   Copyright="String value"
   Category="String value"
   Keywords="String value"
   Comments="String value"
   Created="String representation of Date and Time value"
   Modified="String representation of Date and Time value"
>
   <Property
      Name="String value"
      Value="String value"
   />
   ...
</Info>
```

Examples

```
[CS]

report.Info.Title = "Example";
report.Info.Author = "Siberix Technologies, Canada";
report.Info.Creator = "Siberix Report Writer for Silverlight";
report.Info.Copyright = "© 2003-2012 Siberix Technologies, Canada";
report.Info.Created = System.DateTime.Now;

report.Info.AddProperty("Name", "John");
report.Info.AddProperty("ID", "203-897-349-8723");
```

[VB]

```
report.Info.Title = "Example"
report.Info.Author = "Siberix Technologies, Canada"
report.Info.Creator = "Siberix Report Writer for Silverlight"
report.Info.Copyright = "© 2003-2012 Siberix Technologies, Canada"
report.Info.Created = System.DateTime.Now

report.Info.AddProperty("Name", "John")
report.Info.AddProperty("ID", "203-897-349-8723")
```

[XML]

```
<Info Title="Example" Author="Siberix Technologies, Canada" Creator="Siberix Report Writer for Silverlight" Copyright="©
2003-2012 Siberix Technologies, Canada" Created="5/20/2010 12:52:25 PM">
   <Property Name="Name" Value="John" />
   <Property Name="ID" Value="203-897-349-8723" />
</Info>
```

Preferences

You can set several groups of PDF and XPS preferences.

```
<Preferences>
   <PDF
      ColorSpace="RGB | CMYK | Gray"
   />
      <Info
         AuthorType="Author | Manager | Company"
         ShowCreator="True | False"
      />
      <Viewer
         HideToolbar="True | False"
         HideMenubar="True | False"
         HideWindowUI="True | False"
         FitWindow="True | False"
         CenterWindow="True | False"
         DisplayDocTitle="True | False"
      />
      <Encryptor>
         <Password
            Owner="String value"
            User="String value"
         />
         <Permissions
            Add="True | False"
            Copy="True | False"
            Modify="True | False"
            Print="True | False"
         />
      </Encryptor>
   </PDF>
```

```
  <XPS>
    <Info
      CreatorType="Creator | Author | Manager | Company"
    />
  </XPS>
</Preferences>
```

Examples

```
[CS]

report.Preferences.PDF.Info.AuthorType = Siberix.Report.Preferences.PDF.AuthorType.Company;
report.Preferences.PDF.Info.ShowCreator = true;

report.Preferences.PDF.Viewer.HideToolbar = true;
report.Preferences.PDF.Viewer.HideMenubar = true;

report.Preferences.PDF.Encryptor.Password.Owner = "siberix";
report.Preferences.PDF.Encryptor.Password.User = "test";

report.Preferences.PDF.Encryptor.Permissions.Add = false;
report.Preferences.PDF.Encryptor.Permissions.Copy = false;
report.Preferences.PDF.Encryptor.Permissions.Modify = false;

[VB]

report.Preferences.PDF.Info.AuthorType = Siberix.Report.Preferences.PDF.AuthorType.Company
report.Preferences.PDF.Info.ShowCreator = True

report.Preferences.PDF.Viewer.HideToolbar = True
report.Preferences.PDF.Viewer.HideMenubar = True

report.Preferences.PDF.Encryptor.Password.Owner = "siberix"
report.Preferences.PDF.Encryptor.Password.User = "test"

report.Preferences.PDF.Encryptor.Permissions.Add = False
report.Preferences.PDF.Encryptor.Permissions.Copy = False
report.Preferences.PDF.Encryptor.Permissions.Modify = False

[XML]

<Preferences>
  <PDF>
    <Info AuthorType="Company" ShowCreator="True" />
    <Viewer HideToolbar="True" HideMenubar="True" />
    <Encryptor>
      <Password Owner="siberix" User="test" />
      <Permissions Add="False" Copy="False" Modify="False" />
    </Encryptor>
  </PDF>
</Preferences>
```

Resources

This element allows to embed True Type fonts and Images inside the body of the XML report file.

```
<Resources>
  <Font
    Id="String value"
  >
    Data - Compressed with Flate compressor and encoded with Base64 encoder.
  </Font>
  <Image
```

```
    Id="String value"
  >
    Data - Encoded with Base64 encoder.
  </Image>
  ...
</Resources>
```

Examples

```
[XML]

<Resources>
   <Font Id="Font1">SYiMU3l8FFX6N3qWW...</Font>
   <Image Id="Image1">9B4AAQSkZJRgAB...</Image>
</Resources>
```

Styles

This element allows to define a collection of text styles. It is required to apply a style for every text element in the report.

```
<Styles>
  <Style
    Id="String value"
    CharSpacing="Float value"
    WordSpacing="Float value"
  />
    <Font />
    <Brush />
    <Highlight />
    <Strikeout />
    <Underline />
  </Style>
  ...
</Styles>
```

Examples

```
[CS]

Siberix.Report.Text.Style style1 = new Siberix.Report.Text.Style(new Siberix.Graphics.Font(font1, 12),
Siberix.Graphics.Brushes.Black);

Siberix.Report.Text.Style style2 = new Siberix.Report.Text.Style(new Siberix.Graphics.Font(font2, 14),
Siberix.Graphics.Brushes.Green);

style2.Highlight = Siberix.Graphics.Brushes.Yellow;
style2.Underline = Siberix.Graphics.Pens.Red;
style2.CharSpacing = 2;
style2.WordSpacing = 10;

[VB]

Dim style1 As Siberix.Report.Text.Style = New Siberix.Report.Text.Style(New Siberix.Graphics.Font(font1, 12),
Siberix.Graphics.Brushes.Black)

Dim style2 As Siberix.Report.Text.Style = New Siberix.Report.Text.Style(New Siberix.Graphics.Font(font2, 14),
```

```
Siberix.Graphics.Brushes.Green)

style2.Highlight = Siberix.Graphics.Brushes.Yellow
style2.Underline = Siberix.Graphics.Pens.Red
style2.CharSpacing = 2
style2.WordSpacing = 10

[XML]

<Styles>
   <Style Id="Style1">
      <Font Source="font1" Size="12" />
      <Brush Color="Black" />
   </Style>
   <Style Id="Style2" CharSpacing="2" WordSpacing="10">
      <Font Source="font2" Size="14" />
      <Brush Color="Green" />
      <Highlight Color="Yellow" />
      <Underline Color="Red" />
   </Style>
</Styles>
```

Bookmarks

This element defines the structure of the bookmark tree.

```
<Bookmarks>
   <Bookmark
      Reference="String value"
      Caption="String value"
      Opened="True | False"
   />
      ...
   </Bookmark>
   ...
</Bookmarks>
```

Examples

```
[CS]

Siberix.Report.Bookmarks.IBookmark bookmark1 = report.AddBookmark("Text1", "Caption 1", false);
Siberix.Report.Bookmarks.IBookmark bookmark2 = bookmark1.AddBookmark("Page: 3, 10, 100", "Caption 1.1", true);
Siberix.Report.Bookmarks.IBookmark bookmark3 = bookmark2.AddBookmark("Text2", "Caption 1.1.1", true);
Siberix.Report.Bookmarks.IBookmark bookmark4 = report.AddBookmark("Text3", "Caption 2", true);

[VB]

Dim bookmark1 As Siberix.Report.Bookmarks.IBookmark = report.AddBookmark("Text1", "Caption 1", false)
Dim bookmark2 As Siberix.Report.Bookmarks.IBookmark = bookmark1.AddBookmark("Page: 3, 10, 100", "Caption 1.1", true)
Dim bookmark3 As Siberix.Report.Bookmarks.IBookmark = bookmark2.AddBookmark("Text2", "Caption 1.1.1", true)
Dim bookmark4 As Siberix.Report.Bookmarks.IBookmark = report.AddBookmark("Text3", "Caption 2", true)

[XML]

<Bookmarks>
   <Bookmark Reference="Text1" Caption="Caption 1" Opened="False">
      <Bookmark Reference="Page: 3, 10, 100" Caption="Caption 1.1">
         <Bookmark Reference="Text2" Caption="Caption 1.1.1" />
      </Bookmark>
   </Bookmark>
   <Bookmark Reference="Text3" Caption="Caption 2" />
```

```
</Bookmarks>
```

Sections

This element allows to define sections of various sizes and formatting inside the report. Each section can have its own collection of headers, footers, watermarks and decorations.

```
<Sections>
   <Section
      Flip="True | False"
      Orientation="Portrait | Landscape"
   >
      <Size
         Width="Float value"
         Height="Float value"
      />
      <Alignment />
      <Borders />
      <Spacings />
      <Paddings />
      <Background />
      <Header
         Height="Float value [%]"
         Repeat="True | False"
      >
         <Label />
         <Line />
         <Polyline />
         <Polygon />
         <Rectangle />
         <Ellipse />
         <Arc />
         <Pie />
         <Path />
         <Text + Attached Properties />
         <Image + Attached Properties />
         <Frame + Attached Properties />
         <Group + Attached Properties />
         <Grid + Attached Properties />
         <Slot + Attached Properties />
         <List + Attached Properties />
         <Tree + Attached Properties />
         <Flow + Attached Properties />
         <Repeater + Attached Properties />
         <Site + Attached Properties />
         <Canvas + Attached Properties />
```

```
    <PageNumber + Attached Properties />
    <PageReference + Attached Properties />
    ...
</Header>
<Footer
    Height="Float value [%]"
    Repeat="True | False"
>
    <Label />
    <Line />
    <Polyline />
    <Polygon />
    <Rectangle />
    <Ellipse />
    <Arc />
    <Pie />
    <Path />
    <Text + Attached Properties />
    <Image + Attached Properties />
    <Frame + Attached Properties />
    <Group + Attached Properties />
    <Grid + Attached Properties />
    <Slot + Attached Properties />
    <List + Attached Properties />
    <Tree + Attached Properties />
    <Flow + Attached Properties />
    <Repeater + Attached Properties />
    <Site + Attached Properties />
    <Canvas + Attached Properties />
    <PageNumber + Attached Properties />
    <PageReference + Attached Properties />
    ...
</Footer>
<Watermark
    Repeat="True | False"
>
    <Label />
    <Line />
    <Polyline />
    <Polygon />
    <Rectangle />
    <Ellipse />
    <Arc />
    <Pie />
    <Path />
    <Text + Attached Properties />
    <Image + Attached Properties />
```

```
    <Frame + Attached Properties />
    <Group + Attached Properties />
    <Grid + Attached Properties />
    <Slot + Attached Properties />
    <List + Attached Properties />
    <Tree + Attached Properties />
    <Flow + Attached Properties />
    <Repeater + Attached Properties />
    <Site + Attached Properties />
    <Canvas + Attached Properties />
    <PageNumber + Attached Properties />
    <PageReference + Attached Properties />
    ...
</Watermark>
<Decoration
    Repeat="True | False"
>
    <Label />
    <Line />
    <Polyline />
    <Polygon />
    <Rectangle />
    <Ellipse />
    <Arc />
    <Pie />
    <Path />
    <Text + Attached Properties />
    <Image + Attached Properties />
    <Frame + Attached Properties />
    <Group + Attached Properties />
    <Grid + Attached Properties />
    <Slot + Attached Properties />
    <List + Attached Properties />
    <Tree + Attached Properties />
    <Flow + Attached Properties />
    <Repeater + Attached Properties />
    <Site + Attached Properties />
    <Canvas + Attached Properties />
    <PageNumber + Attached Properties />
    <PageReference + Attached Properties />
    ...
</Decoration>
<Text />
<Image />
<Frame/>
<Group />
<Grid />
```

```
        <Slot />
        <List />
        <Tree />
        <Flow />
        <Repeater />
        <Site />
        <Canvas />
        <PageNumber />
        <PageReference />
        <PageBreak />
        ...
    </Section>
    ...
</Sections>
```

Examples

[CS]

```
Siberix.Report.Section.ISection section = report.AddSection();
section.Size = Siberix.Report.PageSize.Letter;
section.Orientation = Siberix.Report.Orientation.Landscape;
section.Spacings.All = 20;
section.Paddings.All = 5;
section.Borders = new Siberix.Report.Borders(Siberix.Graphics.Pens.Black, 10);

Siberix.Report.Text.Style style1 = new Siberix.Report.Text.Style(new Siberix.Graphics.Font(font1, 18),
Siberix.Graphics.Brushes.Red);

Siberix.Report.Text.Style style2 = new Siberix.Report.Text.Style(new Siberix.Graphics.Font(font1, 12),
Siberix.Graphics.Brushes.Black);

Siberix.Report.Section.IHeader header = section.AddHeader();
header.Repeat = true;

Siberix.Report.Text.IText text = header.AddText(10, 10);
text.Style = style1;
text.AddContent("Header");

text = section.AddText();
text.Style = style2;
text.AddContent("Content...");
```

[VB]

```
Dim section As Siberix.Report.Section.ISection = report.AddSection()
section.Size = Siberix.Report.PageSize.Letter
section.Orientation = Siberix.Report.Orientation.Landscape
section.Spacings.All = 20
section.Paddings.All = 5
section.Borders = New Siberix.Report.Borders(Siberix.Graphics.Pens.Black, 10)

Dim style1 As Siberix.Report.Text.Style = New Siberix.Report.Text.Style(New Siberix.Graphics.Font(font1, 18),
Siberix.Graphics.Brushes.Red)

Dim style2 As Siberix.Report.Text.Style = New Siberix.Report.Text.Style(New Siberix.Graphics.Font(font1, 12),
Siberix.Graphics.Brushes.Black)

Dim header As Siberix.Report.Section.IHeader = section.AddHeader()
header.Repeat = true

Dim text As Siberix.Report.Text.IText = header.AddText(10, 10)
text.Style = style1
text.AddContent("Header")
```

```
text = section.AddText()
text.Style = style2
text.AddContent("Content...")

[XML]

<Report>
   <Styles>
      <Style Id="Style1" Font="font1, 18" Brush="Red" />
      <Style Id="Style2" Font="font1, 12" Brush="Black" />
   </Styles>
   <Sections>
      <Section Size="Letter" Orientation="Landscape" Spacings="20" Paddings="5" Borders="Black, 10">
         <Header Repeat="True">
            <Text Left="10" Top="10" Style="Style1">Header</Text>
         </Header>
         <Text Style="Style2">Content...</Text>
      </Section>
   </Sections>
</Report>
```

Common Definitions

Represent various types and attributes that are widely used across the report as a part of element definitions.

Alignment

Controls the alignment of the element's content.

```
<Alignment
   Horizontal="Left | Center | Right"
   Vertical="Top | Middle | Bottom"
/>
```

Examples

```
[CS]

group.Alignment.Horizontal = Siberix.Report.HorizontalAlignment.Left;
group.Alignment.Vertical = Siberix.Report.VerticalAlignment.Top;

[VB]

group.Alignment.Horizontal = Siberix.Report.HorizontalAlignment.Left
group.Alignment.Vertical = Siberix.Report.VerticalAlignment.Top

[XML]

Alignment="Right"

Alignment="Right, Bottom"

Alignment.Horizontal="Right"
Alignment.Vertical="Middle"

<Group>
   <Alignment Horizontal="Left" Vertical="Top" />
</Group>
```

Borders

This element defines borders. You can specify style for every individual border and corner.

```
<Borders>
   <All />
   <Horizontal />
   <Vertical />
   <Left />
   <Right />
   <Top />
   <Bottom />
   <Corners>
      <TopLeft +
         Radius="Float value"
      />
      <TopRight +
         Radius="Float value"
      />
      <BottomLeft +
         Radius="Float value"
      />
      <BottomRight +
         Radius="Float value"
      />
   </Corners>
</Borders>
```

Examples

```
[CS]

group1.Borders = new Siberix.Report.Borders(Siberix.Graphics.Pens.Black);
group1.Borders.Top = new Siberix.Report.Border(Siberix.Graphics.Pens.Red);

group2.Borders = new Siberix.Report.Borders(Siberix.Graphics.Pens.Blue, 5);

[VB]

group1.Borders = New Siberix.Report.Borders(Siberix.Graphics.Pens.Black)
group1.Borders.Top = New Siberix.Report.Border(Siberix.Graphics.Pens.Red)

group2.Borders = New Siberix.Report.Borders(Siberix.Graphics.Pens.Blue, 5)

[XML]

<Group Borders="Black" Borders.Top="Red" />

<Group Borders="Blue; 10" />

<Group>
   <Borders>
      <Left Color="Black" Width="2" Style="DashDot" />
      <Right Color="Black" Width="2" Style="Dash" />
      <Top Color="Green" Width="2" Style="Dash" />
      <Bottom Color="Green" Width="2" Style="Dot" />
      <Corners>
```

```
        <TopLeft Color="Red" Width="2" Style="Solid" Radius="20" />
        <TopRight Color="Red" Width="2" Style="Solid" Radius="10" />
        <BottomLeft Color="Blue" Width="2" Style="Dash" Radius="10" />
        <BottomRight Color="Blue" Width="2" Style="Dash" Radius="10" />
      </Corners>
   </Borders>
</Group>
```

Spacings

Defines spacings of the element.

```
<Spacings
   All="Float value"
   Horizontal="Float value"
   Vertical="Float value"
   Left="Float value"
   Right="Float value"
   Top="Float value"
   Bottom="Float value"
/>
```

Examples

```
[CS]

text.Spacings.All = 5;

group.Spacings.Horizontal = 5;
group.Spacings.Top = 10;

[VB]

text.Spacings.All = 5

group.Spacings.Horizontal = 5
group.Spacings.Top = 10

[XML]

Spacings="5, 5, 10, 15"

<Spacings Horizontal="5" Vertical="10" />

<Spacings Left="5" Right="5" Top="10" Bottom="10" />
```

Horizontal Spacings

Defines horizontal spacings of the element.

```
<Spacings
   All="Float value"
   Left="Float value"
   Right="Float value"
/>
```

Examples

```
[CS]

column.Spacings.Left = 5;

[VB]

column.Spacings.Left = 5

[XML]

<Spacings Left="5" />
```

Vertical Spacings

Defines vertical spacings of the element.

```
<Spacings
    All="Float value"
    Top="Float value"
    Bottom="Float value"
/>
```

Examples

```
[CS]

row.Spacings.Top = 5;

[VB]

row.Spacings.Top = 5

[XML]

<Spacings Top="5" />
```

Paddings

Defines paddings between the borders and the content of the element.

```
<Paddings
    All="Float value"
    Horizontal="Float value"
    Vertical="Float value"
    Left="Float value"
    Right="Float value"
    Top="Float value"
    Bottom="Float value"
/>
```

Examples

```
[CS]

group.Paddings.Horizontal = 5;
group.Paddings.Top = 10;
```

```
[VB]

group.Paddings.Horizontal = 5
group.Paddings.Top = 10

[XML]

Paddings="5, 5, 10, 15"

<Paddings Horizontal="5" Vertical="10" />

<Paddings Left="5" Right="5" Top="10" Bottom="10" />
```

Background

Defines the style of the background of the element.

```
<Background
   Drawing="String value"
/>
```

Examples

```
[CS]

group1.Background.Brush = Siberix.Graphics.Brushes.Yellow;

group2.Background.Brush = new Siberix.Graphics.LinearGradientBrush(Siberix.Graphics.Colors.Red,
Siberix.Graphics.Colors.Yellow);

[VB]

group1.Background.Brush = Siberix.Graphics.Brushes.Yellow

group2.Background.Brush = New Siberix.Graphics.LinearGradientBrush(Siberix.Graphics.Colors.Red,
Siberix.Graphics.Colors.Yellow)

[XML]

<Group Background="Yellow" />

<Group Background="Yellow; Drawing1" />

<Group>
   <Background Type="LinearGradient" StartColor="Red" EndColor="Yellow" />
</Group>

<Group>
   <Background Type="LinearGradient" StartColor="Red" EndColor="Yellow" Drawing="Drawing1"/>
</Group>
```

Attached Properties

When a layout element is placed inside a container like Site or Watermark it is positioned by absolute coordinates. These coordinates and a rotation angle are set by attached properties.

```
Left="Float value"
Top="Float value"
Angle="Float value"
```

Data Binding

Allows to bind elements to objects and collections. You may set the DataContext directly on the DataBinding object, on the element itself or on any upper container including the report element.

```
<Binding
   Source="String value"
   Path="String value"
   Format="String value"
   Formatter="String value"
/>
```

Examples

```
[CS]

Person person1 = new Person() { Name = "John", Level = 3 };
Person person2 = new Person() { Name = "Alex", Level = 5 };

text.DataContext = new Siberix.Report.Data.DataContext("dc1", person1);
text.Binding = new Siberix.Report.Data.DataBinding("Name");

text.Binding = new Siberix.Report.Data.DataBinding(new Siberix.Report.Data.DataContext("dc2", person2), "Level", "L: {0}");

[VB]

Dim person1 As Person = New Person() With {.Name = "John", .Level = 3}
Dim person2 As Person = New Person() With {.Name = "Alex", .Level = 5}

text.DataContext = New Siberix.Report.Data.DataContext("dc1", person1)
text.Binding = New Siberix.Report.Data.DataBinding("Name")

text.Binding = New Siberix.Report.Data.DataBinding(New Siberix.Report.Data.DataContext("dc2", person2), "Level", "L: {0}")

[XML]

Binding="Name"

<Text DataContext="dc1" Style="Style1" Binding="Name" />

<Text Style="Style1" Binding="Level, 'L: {0}'; dc2" />
```

Text

Represents a text paragraph.

```
<Text
   Id="String value"
   DataContext="String value"
   Style="Style reference"
   Link="Reference"
   Width="Float value [%]"
   Alignment="Left | Center | Right | Justify"
   Flow="LTR | RTL"
   Indent="Float value"
   Interval="Float value"
   KeepSolid="True | False"
   KeepWithNext="True | False"
```

```
>
   <Binding />
   <Spacings />

   Text content ...

   <DropCap
      Char="Char value"
      Style="Style reference"
   >
      <Spacings />
   </DropCap>
   <Leader
      Format="String value"
      Style="Style reference"
   />
   <Binder
      Id="String value"
   >
      <Binding />
   </Binder>
   <Spacer
      Id="String value"
      Style="Style reference"
      Link="Reference"
      Width="Float value"
      Height="Float value"
   />
   <Image
      Id="String value"
      Source="File path or reference to embedded image"
      Width="Float value"
      Height="Float value"
   >
      <Binding />
      <Spacings />
   </Image>
   <Plot
      Id="String value"
      Drawing="String value"
      Width="Float value"
      Height="Float value"
   >
      <Spacings />
   </Plot>
   <LRM
      Id="String value"
```

```
/>
<RLM
   Id="String value"
/>
<LRE
   Id="String value"
/>
<RLE
   Id="String value"
/>
<PDF
   Id="String value"
/>
<LRO
   Id="String value"
/>
<RLO
   Id="String value"
/>
<MergeCode
   Id="String value"
/>
<DateTime
   Format="String value"
/>
<Injector
   Id="String value"
/>
<Block
   Style="Style reference"
   Link="Reference"
>
```

Text content ...

```
   <Block />
   <Binder />
   <Spacer />
   <Image />
   <Plot />
   <LRM />
   <RLM />
   <LRE />
   <RLE />
   <PDF />
   <LRO />
   <RLO />
```

```
        <MergeCode />
        <DateTime />
        <Injector />
        ...
    </Block>
    ...
</Text>
```

Examples

```
[CS]

Siberix.Report.Text.IText text = section.AddText();
text.Style = style1;
text.Width = new Siberix.Report.RelativeWidth(50);
text.Indent = 15;
text.Interval = 5;
text.Spacings.All = 5;
text.Alignment = Siberix.Report.TextAlignment.Justify;
text.AddContent("Content...");
text.AddLineBreak();
text.AddContent("More content...", style2);

[VB]

Dim text As Siberix.Report.Text.IText = section.AddText()
text.Style = style1
text.Width = New Siberix.Report.RelativeWidth(50)
text.Indent = 15
text.Interval = 5
text.Spacings.All = 5
text.Alignment = Siberix.Report.TextAlignment.Justify
text.AddContent("Content...")
text.AddLineBreak()
text.AddContent("More content...", style2)

[XML]

<Text Style="Style1" Width="50%" Indent="15" Interval="5" Spacings="5" Alignment="Justify">Content...
<Block Style="Style2">More content...</Block></Text>
```

Image

Represents an image element.

```
<Image
    Id="String value"
    DataContext="String value"
    Source="File path or reference to embedded image"
    Width="Float value [%]"
    Height="Float value [%]"
>
    <Binding />
    <Spacings />
</Image>
```

Examples

```
[CS]
```

```
Siberix.Graphics.Image img = new Siberix.Graphics.Image("image1");

Siberix.Report.IImage image = section.AddImage(img);
image.Width = new Siberix.Report.DirectWidth(200);
```

[VB]

```
Dim img As Siberix.Graphics.Image = New Siberix.Graphics.Image("image1")

Dim image As Siberix.Report.IImage = section.AddImage(img)
image.Width = New Siberix.Report.DirectWidth(200)
```

[XML]

```
<Image Source="image1" Width="200" />
```

Frame

Represents a drawing area for custom report extension.

```
<Frame
    Id="String value"
    DataContext="String value"
    FactoryId="String value"
    ExtensionId="String value"
    Width="Float value [%]"
    Height="Float value [%]"
>
    <Spacings />
    <Data>...</Data>
</Frame>
```

Examples

[CS]

```
report.RegisterExtensionFactory("Factory1", new ExtensionFactory());

Siberix.Report.IFrame frame = section.AddFrame("Factory1", "Extension1");
frame.Width = new Siberix.Report.DirectWidth(150);
```

[VB]

```
report.RegisterExtensionFactory("Factory1", New ExtensionFactory())

Dim frame As Siberix.Report.IFrame = section.AddFrame("Factory1", "Extension1")
frame.Width = New Siberix.Report.DirectWidth(150)
```

[XML]

```
<Frame FactoryId="Factory1" ExtensionId="Extension1" Width="150" />
```

Group

Represents a group element.

```
<Group
    Id="String value"
    DataContext="String value"
```

```
    Width="Float value [%]"
    Height="Float value [%]"
    KeepSolid="True | False"
    KeepWithNext="True | False"
    StretchOnBreak="True | False"
    MinHeightOnBreak="Float value"
>
    <Alignment />
    <Borders />
    <Spacings />
    <Paddings />
    <Background />
    <Text />
    <Image />
    <Frame/>
    <Group />
    <Grid />
    <Slot />
    <List />
    <Tree />
    <Flow />
    <Repeater />
    <Site />
    <Canvas />
    <PageNumber />
    <PageReference />
    <PageBreak />
    <Injector
        Id="String value"
    />
    ...
</Group>
```

Examples

[CS]

```
Siberix.Report.IGroup group = section.AddGroup();
group.Height = new Siberix.Report.RelativeHeight(100);
group.Alignment.Vertical = Siberix.Report.VerticalAlignment.Middle;
group.Borders = new Siberix.Report.Borders(Siberix.Graphics.Pens.Black);
group.Paddings.All = 5;

Siberix.Report.Text.IText text = group.AddText();
text.Style = style1;
text.AddContent("Text paragraph...");
```

[VB]

```
Dim group As Siberix.Report.IGroup = section.AddGroup()
group.Height = New Siberix.Report.RelativeHeight(100)
group.Alignment.Vertical = Siberix.Report.VerticalAlignment.Middle
group.Borders = New Siberix.Report.Borders(Siberix.Graphics.Pens.Black)
group.Paddings.All = 5
```

```
Dim text As Siberix.Report.Text.IText = group.AddText()
text.Style = style1
text.AddContent("Text paragraph...")

[XML]

<Group Height="100%" Alignment.Vertical="Middle" Borders="Black" Paddings="5">
   <Text Style="Style1">Text paragraph...</Text>
</Group>
```

Grid

Represents a grid element.

```
<Grid
   Id="String value"
   DataContext="String value"
   TemplateSelector="String value"
   Width="Float value [%]"
   Height="Float value [%]"
   KeepSolid="True | False"
   KeepWithNext="True | False"
   StretchOnBreak="True | False"
   MinHeightOnBreak="Float value"
>
   <Binding />
   <Borders />
   <Spacings />
   <Paddings />
   <Background />
   <Column
      Id="String value"
      Width="Float value [%]"
   >
      <Spacings />
   </Column>
   ...
   <Header
      Id="String value"
      DataContext="String value"
      Repeat="True | False"
   >
      <Row />
      ...
   </Header>
   <Footer
      Id="String value"
      DataContext="String value"
      Repeat="True | False"
```

```
>
   <Row />
   ...
</Footer>
<RowTemplate
   Id="String value"
   Height="Float value [%]"
   KeepSolid="True | False"
   KeepWithNext="True | False"
>
   <Spacings />
   <Cell />
   ...
</RowTemplate>
<Row
   Id="String value"
   DataContext="String value"
   Height="Float value [%]"
   KeepSolid="True | False"
   KeepWithNext="True | False"
>
   <Spacings />
   <Cell
      Id="String value"
      DataContext="String value"
      ColSpan="Integer value > 0"
      RowSpan="Integer value > 0"
   >
      <Alignment />
      <Borders />
      <Paddings />
      <Background />
      <Text />
      <Image />
      <Frame/>
      <Group />
      <Grid />
      <Slot />
      <List />
      <Tree />
      <Flow />
      <Repeater />
      <Site />
      <Canvas />
      <PageNumber />
      <PageReference />
      <PageBreak />
```

```
        <Injector
            Id="String value"
        />
        ...
      </Cell>
      ...
    </Row>
    <Injector
      Id="String value"
    />
    ...
</Grid>
```

Examples

[CS]

```
Siberix.Report.Grid.IGrid grid = section.AddGrid();
grid.Borders = new Siberix.Report.Borders(Siberix.Graphics.Pens.Black);
grid.Spacings.All = 5;
grid.Background = new Siberix.Report.Background(new Siberix.Graphics.Color(240, 240, 220));

// Columns
Siberix.Report.Grid.IColumn column = grid.AddColumn();
column.Width = new Siberix.Report.RelativeWidth(30);

column = grid.AddColumn();
column.Width = new Siberix.Report.RelativeWidth(70);

// Header
Siberix.Report.Grid.IHeader header = grid.AddHeader();
header.Repeat = true;

Siberix.Report.Grid.IRow row = header.AddRow();

Siberix.Report.Grid.ICell cell = row.AddCell();
cell.ColSpan = 2;
cell.Alignment.Horizontal = Siberix.Report.HorizontalAlignment.Center;
cell.Borders = new Siberix.Report.Borders(Siberix.Graphics.Pens.Black);
cell.Paddings.All = 5;
cell.Background = new Siberix.Report.Background(new Siberix.Graphics.Color(220, 200, 240));

Siberix.Report.Text.IText text = cell.AddText();
text.Style = style1;
text.AddContent("Header");

// Rows
row = grid.AddRow();

cell = row.AddCell();
cell.Borders = new Siberix.Report.Borders(Siberix.Graphics.Pens.Black);
cell.Paddings.All = 5;

text = cell.AddText();
text.Style = style2;
text.AddContent("row 1 cell 1");

cell = row.AddCell();
cell.Borders = new Siberix.Report.Borders(Siberix.Graphics.Pens.Black);
cell.Paddings.All = 5;

text = cell.AddText();
text.Style = style2;
text.AddContent("row 1 cell 2");
```

```
row = grid.AddRow();

cell = row.AddCell();
cell.ColSpan = 2;
cell.Borders = new Siberix.Report.Borders(Siberix.Graphics.Pens.Black);
cell.Paddings.All = 5;

text = cell.AddText();
text.Style = style2;
text.AddContent("row 2 cell 1");
```

[VB]

```
Dim grid As Siberix.Report.Grid.IGrid = section.AddGrid()
grid.Borders = New Siberix.Report.Borders(Siberix.Graphics.Pens.Black)
grid.Spacings.All = 5
grid.Background = New Siberix.Report.Background(New Siberix.Graphics.Color(240, 240, 220))

' Columns
Dim column As Siberix.Report.Grid.IColumn = grid.AddColumn()
column.Width = New Siberix.Report.RelativeWidth(30)

column = grid.AddColumn()
column.Width = New Siberix.Report.RelativeWidth(70)

' Header
Dim header As Siberix.Report.Grid.IHeader = grid.AddHeader()
header.Repeat = True

Dim row As Siberix.Report.Grid.IRow = header.AddRow()

Dim cell As Siberix.Report.Grid.ICell = row.AddCell()
cell.ColSpan = 2
cell.Alignment.Horizontal = Siberix.Report.HorizontalAlignment.Center
cell.Borders = New Siberix.Report.Borders(Siberix.Graphics.Pens.Black)
cell.Paddings.All = 5
cell.Background = New Siberix.Report.Background(New Siberix.Graphics.Color(220, 200, 240))

Dim text As Siberix.Report.Text.IText = cell.AddText()
text.Style = style1
text.AddContent("Header")

' Rows
row = grid.AddRow()

cell = row.AddCell()
cell.Borders = New Siberix.Report.Borders(Siberix.Graphics.Pens.Black)
cell.Paddings.All = 5

text = cell.AddText()
text.Style = style2
text.AddContent("row 1 cell 1")

cell = row.AddCell()
cell.Borders = New Siberix.Report.Borders(Siberix.Graphics.Pens.Black)
cell.Paddings.All = 5

text = cell.AddText()
text.Style = style2
text.AddContent("row 1 cell 2")

row = grid.AddRow()

cell = row.AddCell()
cell.ColSpan = 2
cell.Borders = New Siberix.Report.Borders(Siberix.Graphics.Pens.Black)
cell.Paddings.All = 5

text = cell.AddText()
text.Style = style2
text.AddContent("row 2 cell 1")
```

[XML]

```
<Grid Borders="Black" Spacings="5" Background="#FFF0F0DC">
   <Column Width="30%" />
   <Column Width="70%" />
   <Header Repeat="True">
      <Row>
         <Cell Borders="Black" Paddings="5" Background="#FFDCC8F0" Alignment="Center" ColSpan="2">
            <Text Style="Style1">Header</Text>
         </Cell>
      </Row>
   </Header>
   <Row>
      <Cell Borders="Black" Paddings="5">
         <Text Style="Style2">row 1 cell 1</Text>
      </Cell>
      <Cell Borders="Black" Paddings="5">
         <Text Style="Style2">row 1 cell 2</Text>
      </Cell>
   </Row>
   <Row>
      <Cell Borders="Black" Paddings="5" ColSpan="2">
         <Text Style="Style2">row 2 cell 1</Text>
      </Cell>
   </Row>
</Grid>
```

Slot

Represents a slot element. You may use this element to layout data horizontally similar to a single row in a grid.

```
<Slot
   Id="String value"
   DataContext="String value"
   Width="Float value [%]"
   Height="Float value [%]"
   KeepSolid="True | False"
   KeepWithNext="True | False"
   StretchOnBreak="True | False"
   MinHeightOnBreak="Float value"
>
   <Borders />
   <Spacings />
   <Paddings />
   <Background />
   <Cell
      Id="String value"
      DataContext="String value"
      Width="Float value [%]"
   >
      <Alignment />
      <Borders />
      <Spacings />
      <Paddings />
```

```
        <Background />
        <Text />
        <Image />
        <Frame/>
        <Group />
        <Grid />
        <Slot />
        <List />
        <Tree />
        <Flow />
        <Repeater />
        <Site />
        <Canvas />
        <PageNumber />
        <PageReference />
        <PageBreak />
        <Injector
           Id="String value"
        />
        ...
    </Cell>
        ...
    <Injector
        Id="String value"
    />
    ...
</Slot>
```

Examples

[CS]

```
Siberix.Report.Slot.ISlot slot = section.AddSlot();
slot.Borders = new Siberix.Report.Borders(Siberix.Graphics.Pens.Black);

Siberix.Report.Slot.ICell cell = slot.AddCell();
cell.Width = new Siberix.Report.RelativeWidth(30);
cell.Borders = new Siberix.Report.Borders(Siberix.Graphics.Pens.Black);
cell.Paddings.All = 5;

Siberix.Report.Text.IText text = cell.AddText();
text.Style = style1;
text.AddContent("cell 1");

cell = slot.AddCell();
cell.Width = new Siberix.Report.RelativeWidth(70);
cell.Borders = new Siberix.Report.Borders(Siberix.Graphics.Pens.Black);
cell.Paddings.All = 5;

text = cell.AddText();
text.Style = style2;
text.AddContent("cell 2");
```

[VB]

```
Dim slot As Siberix.Report.Slot.ISlot = section.AddSlot()
slot.Borders = New Siberix.Report.Borders(Siberix.Graphics.Pens.Black)
```

```
Dim cell As Siberix.Report.Slot.ICell = slot.AddCell()
cell.Width = New Siberix.Report.RelativeWidth(30)
cell.Borders = New Siberix.Report.Borders(Siberix.Graphics.Pens.Black)
cell.Paddings.All = 5

Dim text As Siberix.Report.Text.IText = cell.AddText()
text.Style = style1
text.AddContent("cell 1")

cell = slot.AddCell()
cell.Width = New Siberix.Report.RelativeWidth(70)
cell.Borders = New Siberix.Report.Borders(Siberix.Graphics.Pens.Black)
cell.Paddings.All = 5

text = cell.AddText()
text.Style = style2
text.AddContent("cell 2")
```

[XML]

```
<Slot Borders="Black">
   <Cell Width="30%" Borders="Black" Paddings="5">
      <Text Style="Style1">cell 1</Text>
   </Cell>
   <Cell Width="70%" Borders="Black" Paddings="5">
      <Text Style="Style2">cell 2</Text>
   </Cell>
</Slot>
```

List

Represents a list element.

```
<List
   Id="String value"
   DataContext="String value"
   Width="Float value [%]"
   Indent="Float value"
   Interval="Float value"
   KeepSolid="True | False"
   KeepWithNext="True | False"
>
   <Binding />
   <Spacings />
   <Bullets
      Type="Circle | Square | Decimal | SmallLetters | BigLetters | SmallRoman | BigRoman"
      Template="String value"
      Style="Style reference"
   />
   <ItemTemplate
      Id="String value"
      KeepSolid="True | False"
      KeepWithNext="True | False"
   >
      <Text />
```

```
    <Image />
    <Frame/>
    <Group />
    <Grid />
    <Slot />
    <List />
    <Tree />
    <Flow />
    <Repeater />
    <Site />
    <Canvas />
    <PageNumber />
    <PageReference />
    <PageBreak />
    <Injector
       Id="String value"
    />
    ...
</ItemTemplate>
<Item
    Id="String value"
    KeepSolid="True | False"
    KeepWithNext="True | False"
>
    <Text />
    <Image />
    <Frame/>
    <Group />
    <Grid />
    <Slot />
    <List />
    <Tree />
    <Flow />
    <Repeater />
    <Site />
    <Canvas />
    <PageNumber />
    <PageReference />
    <PageBreak />
    <Injector
       Id="String value"
    />
    ...
</Item>
<Injector
    Id="String value"
/>
```

...
</List>

Examples

[CS]

```
Siberix.Report.List.IList list = section.AddList();
list.Spacings.All = 5;
list.Interval = 5;
list.Indent = 50;
list.Bullets.Type = Siberix.Report.BulletType.Decimal;
list.Bullets.Template = "{0}.";
list.Bullets.Style = style1;

Siberix.Report.List.IItem item = list.AddItem();

Siberix.Report.Text.IText text = item.AddText();
text.Style = style2;
text.AddContent("List item 1 ");

item = list.AddItem();

text = item.AddText();
text.Style = style2;
text.AddContent("List item 2 ");

Siberix.Report.List.IList sublist = item.AddList();
sublist.Spacings.Top = 5;
sublist.Interval = 5;
sublist.Bullets.Type = Siberix.Report.BulletType.SmallLetters;
sublist.Bullets.Style = style3;
sublist.Bullets.Template = "{0})";

item = sublist.AddItem();

text = item.AddText();
text.Style = style2;
text.AddContent("Sublist item 1");

item = sublist.AddItem();

text = item.AddText();
text.Style = style2;
text.AddContent("Sublist item 2");
```

[VB]

```
Dim list As Siberix.Report.List.IList = section.AddList()
list.Spacings.All = 5
list.Interval = 5
list.Indent = 50
list.Bullets.Type = Siberix.Report.BulletType.Decimal
list.Bullets.Template = "{0}."
list.Bullets.Style = style1

Dim item As Siberix.Report.List.IItem = list.AddItem()

Dim text As Siberix.Report.Text.IText = item.AddText()
text.Style = style2
text.AddContent("List item 1 ")

item = list.AddItem()

text = item.AddText()
text.Style = style2
text.AddContent("List item 2 ")

Dim sublist As Siberix.Report.List.IList = item.AddList()
sublist.Spacings.Top = 5
sublist.Interval = 5
```

```
sublist.Bullets.Type = Siberix.Report.BulletType.SmallLetters
sublist.Bullets.Style = style3
sublist.Bullets.Template = "{0})"

item = sublist.AddItem()

text = item.AddText()
text.Style = style2
text.AddContent("Sublist item 1")

item = sublist.AddItem()

text = item.AddText()
text.Style = style2
text.AddContent("Sublist item 2");
```

[XML]

```
<List Spacings="5" Indent="50" Interval="5">
   <Bullets Type="Decimal" Template="{0}." Style="Style1" />
   <Item>
      <Text Style="Style2">List item 1 </Text>
   </Item>
   <Item>
      <Text Style="Style2">List item 2 </Text>
      <List Spacings="0, 0, 5, 0" Indent="20" Interval="5">
         <Bullets Type="SmallLetters" Template="{0})" Style="Style3" />
         <Item>
            <Text Style="Style2">Sublist item 1</Text>
         </Item>
         <Item>
            <Text Style="Style2">Sublist item 2</Text>
         </Item>
      </List>
   </Item>
</List>
```

Tree

Represents a tree element.

```
<Tree
   Id="String value"
   DataContext="String value"
   Width="Float value [%]"
   Indent="Float value"
   Interval="Float value"
   KeepSolid="True | False"
   KeepWithNext="True | False"
>
   <Spacings />
   <Lines />
   <Text />
   <Image />
   <Frame/>
   <Group />
   <Grid />
   <Slot />
```

```
    <List />
    <Tree />
    <Flow />
    <Repeater />
    <Site />
    <Canvas />
    <PageNumber />
    <PageReference />
    <PageBreak />
    <Injector
       Id="String value"
    />
    <Node
       Id="String value"
       DataContext="String value"
       KeepSolid="True | False"
    >
       <Text />
       <Image />
       <Frame/>
       <Group />
       <Grid />
       <Slot />
       <List />
       <Tree />
       <Flow />
       <Repeater />
       <Site />
       <Canvas />
       <PageNumber />
       <PageReference />
       <PageBreak />
       <Injector
          Id="String value"
       />
       <Node />
       ...
    </Node>
    ...
</Tree>
```

Examples

```
[CS]

Siberix.Report.Tree.ITree tree = section.AddTree();
tree.Width = new Siberix.Report.RelativeWidth(60);
tree.Indent = 20;
tree.Interval = 10;
tree.Spacings.All = 20;
```

```
tree.Lines.Pen = Siberix.Graphics.Pens.Blue;

Siberix.Report.Text.IText text = tree.AddText();
text.Style = style1;
text.AddContent("Tree");

Siberix.Report.Tree.INode node1 = tree.AddNode();

text = node1.AddText();
text.Style = style1;
text.AddContent("Node 1");

Siberix.Report.Tree.INode node2 = tree.AddNode();

text = node2.AddText();
text.Style = style1;
text.AddContent("Node 2");

Siberix.Report.Tree.INode node3 = node2.AddNode();

text = node3.AddText();
text.Style = style1;
text.AddContent("Node 2.1");
```

[VB]

```
Dim tree As Siberix.Report.Tree.ITree = section.AddTree()
tree.Width = New Siberix.Report.RelativeWidth(60)
tree.Indent = 20
tree.Interval = 10
tree.Spacings.All = 20
tree.Lines.Pen = Siberix.Graphics.Pens.Blue

Dim text As Siberix.Report.Text.IText = tree.AddText()
text.Style = style1
text.AddContent("Tree")

Dim node1 As Siberix.Report.Tree.INode = tree.AddNode()

text = node1.AddText()
text.Style = style1
text.AddContent("Node 1")

Dim node2 As Siberix.Report.Tree.INode = tree.AddNode()

text = node2.AddText()
text.Style = style1
text.AddContent("Node 2")

Dim node3 As Siberix.Report.Tree.INode = node2.AddNode()

text = node3.AddText()
text.Style = style1
text.AddContent("Node 2.1")
```

[XML]

```
<Tree Width="60%" Spacings="20" Indent="20" Interval="10" Lines="Blue">
   <Text Style="Style3">Tree</Text>
   <Node>
      <Text Style="Style3">Node 1</Text>
   </Node>
   <Node>
      <Text Style="Style3">Node 2</Text>
      <Node>
         <Text Style="Style3">Node 2.1</Text>
      </Node>
   </Node>
</Tree>
```

Flow

Represents a flow element. You can use this element to distribute the content by columns.

```
<Flow
   Id="String value"
   DataContext="String value"
   Width="Float value [%]"
   Height="Float value [%]"
   KeepSolid="True | False"
   KeepWithNext="True | False"
>
   <Spacings />
   <Column
      Width="Float value [%]"
   >
      <Alignment />
      <Borders />
      <Spacings />
      <Paddings />
      <Background />
      ...
   </Column>
   <Text />
   <Image />
   <Frame/>
   <Group />
   <Grid />
   <Slot />
   <List />
   <Tree />
   <Flow />
   <Repeater />
   <Site />
   <Canvas />
   <PageNumber />
   <PageReference />
   <PageBreak />
   <ColumnBreak />
   <Injector
      Id="String value"
   />
   ...
</Flow>
```

Examples

[CS]

```
Siberix.Report.Flow.IFlow flow = section.AddFlow();

Siberix.Report.Flow.IColumn column1 = flow.AddColumn();
column1.Width = new Siberix.Report.RelativeWidth(40);
column1.Paddings.All = 5;
column1.Background.Brush = Siberix.Graphics.Brushes.Wheat;

Siberix.Report.Flow.IColumn column2 = flow.AddColumn();
column2.Width = new Siberix.Report.RelativeWidth(60);
column2.Paddings.All = 5;
column2.Background.Brush = Siberix.Graphics.Brushes.Yellow;

Siberix.Report.Text.IText text = flow.AddText();
text.Style = style1;
text.AddContent("Text paragraph 1");

text = flow.AddText();
text.Style = style1;
text.AddContent("Text paragraph 2");
```

[VB]

```
Dim flow As Siberix.Report.Flow.IFlow = section.AddFlow()

Dim column1 As Siberix.Report.Flow.IColumn = flow.AddColumn()
column1.Width = New Siberix.Report.RelativeWidth(40)
column1.Paddings.All = 5
column1.Background.Brush = Siberix.Graphics.Brushes.Wheat

Dim column2 As Siberix.Report.Flow.IColumn = flow.AddColumn()
column2.Width = New Siberix.Report.RelativeWidth(60)
column2.Paddings.All = 5
column2.Background.Brush = Siberix.Graphics.Brushes.Yellow

Dim text As Siberix.Report.Text.IText = flow.AddText()
text.Style = style1
text.AddContent("Text paragraph 1")

text = flow.AddText()
text.Style = style1
text.AddContent("Text paragraph 2")
```

[XML]

```
<Flow>
   <Column Width="40%" Paddings="5" Background="Wheat" />
   <Column Width="60%" Paddings="5" Background="Yellow" />
   <Text Style="Style1">Text paragraph 1</Text>
   <Text Style="Style1">Text paragraph 2</Text>
</Flow>
```

Repeater

Represents a repeater element.

```
<Repeater
   Id="String value"
   DataContext="String value"
   Width="Float value [%]"
   Interval="Float value"
   KeepSolid="True | False"
   KeepWithNext="True | False"
>
   <Binding />
```

```
    <Spacings />
    <ItemTemplate
        Id="String value"
        KeepSolid="True | False"
        KeepWithNext="True | False"
    >
        <Text />
        <Image />
        <Frame/>
        <Group />
        <Grid />
        <Slot />
        <List />
        <Tree />
        <Flow />
        <Repeater />
        <Site />
        <Canvas />
        <PageNumber />
        <PageReference />
        <PageBreak />
        <Injector
            Id="String value"
        />
        ...
    </ItemTemplate>
    <Injector
        Id="String value"
    />
    ...
</List>
```

Examples

[XML]

```
<Repeater Binding="" TemplateSelector="ts1" Width="75%">
	<ItemTemplate>
		<Text Style="Style1" Binding="Id" Binding.Format="Id: {0}" />
		<Text Style="Style1" Binding="Description" Alignment="Justify"/>
	</ItemTemplate>

	<ItemTemplate>
		<Text Style="Style2" Binding="Id, 'Selected Id: {0}'" />
		<Group Background="LightYellow" Borders="Black; 10" Paddings="5">
			<Text Style="Style3" Binding.Path="Description" Binding.Format="{0}" />
		</Group>
	</ItemTemplate>
</Repeater>
```

Site

Represents a site element. Content elements are placed on the site by their absolute coordinates. You can also specify a rotation angle for any element there.

```
<Site
   Id="String value"
   DataContext="String value"
   Width="Float value [%]"
   Height="Float value [%]"
   KeepWithNext="True | False"
>
   <Borders />
   <Spacings />
   <Paddings />
   <Background />
   <Label />
   <Line />
   <Polyline />
   <Polygon />
   <Rectangle />
   <Ellipse />
   <Arc />
   <Pie />
   <Path />
   <Text + Attached Properties />
   <Image + Attached Properties />
   <Frame + Attached Properties />
   <Group + Attached Properties />
   <Grid + Attached Properties />
   <Slot + Attached Properties />
   <List + Attached Properties />
   <Tree + Attached Properties />
   <Flow + Attached Properties />
   <Repeater + Attached Properties />
   <Site + Attached Properties />
   <Canvas + Attached Properties />
   <PageNumber + Attached Properties />
   <PageReference + Attached Properties />
   <Injector
      Id="String value"
   />
   ...
</Site>
```

Examples

[CS]

```
Siberix.Report.ISite site = section.AddSite();
site.Width = new Siberix.Report.RelativeWidth(100);
site.Height = new Siberix.Report.DirectHeight(350);
site.Borders = new Siberix.Report.Borders(Siberix.Graphics.Pens.Blue);

Siberix.Report.Text.IText text = site.AddText(10, 10);
text.Style = style1;
text.AddContent("Text paragraph...");

text = site.AddText(10, 50, 45);
text.Style = style1;
text.AddContent("Rotated text paragraph...");
```

[VB]

```
Dim site As Siberix.Report.ISite = section.AddSite()
site.Width = New Siberix.Report.RelativeWidth(100)
site.Height = New Siberix.Report.DirectHeight(350)
site.Borders = New Siberix.Report.Borders(Siberix.Graphics.Pens.Blue)

Dim text As Siberix.Report.Text.IText = site.AddText(10, 10)
text.Style = style1
text.AddContent("Text paragraph...")

text = site.AddText(10, 50, 45)
text.Style = style1
text.AddContent("Rotated text paragraph...")
```

[XML]

```
<Site Width="100%" Height="350" Borders="Blue">
   <Text Left="10" Top="10" Style="Style1">Text paragraph...</Text>
   <Text Left="10" Top="50" Angle="45" Style="Style1">Rotated text paragraph...</Text>
</Site>
```

Shapes

Represents a shape factory. It provides a collection of methods to create basic shape elements.

Label

Represents a text label.

```
<Label
   X="Float value"
   Y="Float value"
   Text="String value"
   Angle="Float value"
>
   <Font />
   <Brush />
</Label>
```

Examples

[CS]

```
Siberix.Report.Shapes.ILabel label = site.Shapes.AddLabel();
label.Font = new Siberix.Graphics.Font(font1, 14);
label.Brush = Siberix.Graphics.Brushes.Black;
label.X = 60;
```

```
label.Y = 30;
label.Text = "Label...";
label.Angle = 15;

[VB]

Dim label As Siberix.Report.Shapes.ILabel = site.Shapes.AddLabel()
label.Font = New Siberix.Graphics.Font(font1, 14)
label.Brush = Siberix.Graphics.Brushes.Black
label.X = 60
label.Y = 30
label.Text = "Label..."
label.Angle = 15

[XML]

<Label X="60" Y="30" Text="Label..." Angle="15" Font="font1, 14" Brush="Black" />
```

Line

Represents a line.

```
<Line
   X1="Float value"
   Y1="Float value"
   X2="Float value"
   Y2="Float value"
>
   <Pen />
</Line>
```

Examples

```
[CS]

Siberix.Report.Shapes.ILine line = site.Shapes.AddLine();
line.Pen = new Siberix.Graphics.Pen(Siberix.Graphics.Colors.Green, 5);
line.X1 = 220;
line.Y1 = 30;
line.X2 = 320;
line.Y2 = 130;

[VB]

Dim line As Siberix.Report.Shapes.ILine = site.Shapes.AddLine()
line.Pen = New Siberix.Graphics.Pen(Siberix.Graphics.Colors.Green, 5)
line.X1 = 220
line.Y1 = 30
line.X2 = 320
line.Y2 = 130

[XML]

<Line X1="220" Y1="30" X2="320" Y2="130" Pen="Green, 5" />
```

Polyline

Represents a polyline.

```
<Polyline
   Points="Float value - X, Float value - Y ..."
```

```
>
   <Pen />
</Polyline>
```

Examples

```
[CS]

Siberix.Report.Shapes.IPolyline polyline = site.Shapes.AddPolyline();
polyline.Pen = new Siberix.Graphics.Pen(Siberix.Graphics.Colors.Green, 5, Siberix.Graphics.DashStyle.DashDot);

Siberix.Graphics.PointCollection points = new Siberix.Graphics.PointCollection();
points.Add(30, 200);
points.Add(185, 220);
points.Add(150, 350);
points.Add(125, 260);
points.Add(70, 300);

polyline.Points = points;

[VB]

Dim polyline As Siberix.Report.Shapes.IPolyline = site.Shapes.AddPolyline()
polyline.Pen = New Siberix.Graphics.Pen(Siberix.Graphics.Colors.Green, 5, Siberix.Graphics.DashStyle.DashDot)

Dim points As Siberix.Graphics.PointCollection = New Siberix.Graphics.PointCollection()
points.Add(30, 200)
points.Add(185, 220)
points.Add(150, 350)
points.Add(125, 260)
points.Add(70, 300)

polyline.Points = points

[XML]

<Polyline Points="30, 200 185, 220 150, 350 125, 260 70, 300" Pen="Green, 5, DashDot" />
```

Polygon

Represents a polygon.

```
<Polygon
   Points="Float value - X, Float value - Y ..."
>
   <Pen />
   <Brush />
</Polygon>
```

Examples

```
[CS]

Siberix.Report.Shapes.IPolygon polygon = site.Shapes.AddPolygon();
polygon.Pen = new Siberix.Graphics.Pen(Siberix.Graphics.Colors.Green, 5, Siberix.Graphics.DashStyle.DashDot);
polygon.Brush = Siberix.Graphics.Brushes.Yellow;

Siberix.Graphics.PointCollection points = new Siberix.Graphics.PointCollection();
points.Add(30, 200);
points.Add(185, 220);
points.Add(150, 350);
points.Add(125, 260);
points.Add(70, 300);
```

```
polygon.Points = points;
```

[VB]

```
Dim polygon As Siberix.Report.Shapes.IPolygon = site.Shapes.AddPolygon()
polygon.Pen = New Siberix.Graphics.Pen(Siberix.Graphics.Colors.Green, 5, Siberix.Graphics.DashStyle.DashDot)
polygon.Brush = Siberix.Graphics.Brushes.Yellow

Dim points As Siberix.Graphics.PointCollection = New Siberix.Graphics.PointCollection()
points.Add(30, 200)
points.Add(185, 220)
points.Add(150, 350)
points.Add(125, 260)
points.Add(70, 300)

polygon.Points = points
```

[XML]

```
<Polygon Points="30, 200 185, 220 150, 350 125, 260 70, 300" Pen="Green, 5, DashDot" Brush="Yellow" />
```

Rectangle

Represents a rectangle.

```
<Rectangle
    X="Float value"
    Y="Float value"
    Width="Float value"
    Height="Float value"
    Radius="Float value"
    Angle="Float value"
>
    <Pen />
    <Brush />
</Rectangle>
```

Examples

[CS]

```
Siberix.Report.Shapes.IRectangle rectangle = site.Shapes.AddRectangle();
rectangle.Pen = new Siberix.Graphics.Pen(Siberix.Graphics.Colors.Red, 3);
rectangle.Brush = Siberix.Graphics.Brushes.Yellow;
rectangle.X = 50;
rectangle.Y = 10;
rectangle.Width = 100;
rectangle.Height = 75;
rectangle.Radius = 5;
rectangle.Angle = 15;
```

[VB]

```
Dim rectangle As Siberix.Report.Shapes.IRectangle = site.Shapes.AddRectangle()
rectangle.Pen = New Siberix.Graphics.Pen(Siberix.Graphics.Colors.Red, 3)
rectangle.Brush = Siberix.Graphics.Brushes.Yellow
rectangle.X = 50
rectangle.Y = 10
rectangle.Width = 100
rectangle.Height = 75
rectangle.Radius = 5
rectangle.Angle = 15
```

[XML]

```
<Rectangle X="50" Y="10" Width="100" Height="75" Radius="5" Angle="15" Pen="Red, 3" Brush="Yellow" />
```

Ellipse

Represents an ellipse.

```
<Ellipse
    X="Float value"
    Y="Float value"
    Width="Float value"
    Height="Float value"
    Angle="Float value"
>
    <Pen />
    <Brush />
</Ellipse>
```

Examples

[CS]

```
Siberix.Report.Shapes.IEllipse ellipse = site.Shapes.AddEllipse();
ellipse.Pen = new Siberix.Graphics.Pen(Siberix.Graphics.Colors.Red, 3);
ellipse.Brush = Siberix.Graphics.Brushes.Yellow;
ellipse.X = 50;
ellipse.Y = 10;
ellipse.Width = 100;
ellipse.Height = 75;
ellipse.Angle = 15;
```

[VB]

```
Dim ellipse As Siberix.Report.Shapes.IEllipse = site.Shapes.AddEllipse()
ellipse.Pen = New Siberix.Graphics.Pen(Siberix.Graphics.Colors.Red, 3)
ellipse.Brush = Siberix.Graphics.Brushes.Yellow
ellipse.X = 50
ellipse.Y = 10
ellipse.Width = 100
ellipse.Height = 75
ellipse.Angle = 15
```

[XML]

```
<Ellipse X="50" Y="10" Width="100" Height="75" Angle="15" Pen="Red, 3" Brush="Yellow" />
```

Arc

Represents an arc.

```
<Arc
    X="Float value"
    Y="Float value"
    Width="Float value"
    Height="Float value"
    StartAngle="Float value"
```

```
    EndAngle="Float value"
    Angle="Float value"
>
    <Pen />
</Arc>
```

Examples

```
[CS]

Siberix.Report.Shapes.IArc arc = site.Shapes.AddArc();
arc.Pen = new Siberix.Graphics.Pen(Siberix.Graphics.Colors.Red, 3);
arc.X = 50;
arc.Y = 10;
arc.Width = 100;
arc.Height = 75;
arc.StartAngle = 30;
arc.EndAngle = 125;
arc.Angle = 15;

[VB]

Dim arc As Siberix.Report.Shapes.IArc = site.Shapes.AddArc()
arc.Pen = New Siberix.Graphics.Pen(Siberix.Graphics.Colors.Red, 3)
arc.X = 50
arc.Y = 10
arc.Width = 100
arc.Height = 75
arc.StartAngle = 30
arc.EndAngle = 125
arc.Angle = 15

[XML]

<Arc X="50" Y="10" Width="100" Height="75" StartAngle="30" EndAngle="125" Angle="15" Pen="Red, 3" />
```

Pie

Represents a pie.

```
<Pie
    X="Float value"
    Y="Float value"
    Width="Float value"
    Height="Float value"
    StartAngle="Float value"
    EndAngle="Float value"
    Angle="Float value"
>
    <Pen />
    <Brush />
</Pie>
```

Examples

```
[CS]

Siberix.Report.Shapes.IPie pie = site.Shapes.AddPie();
pie.Pen = new Siberix.Graphics.Pen(Siberix.Graphics.Colors.Red, 3);
pie.Brush = Siberix.Graphics.Brushes.Yellow;
```

```
pie.X = 50;
pie.Y = 10;
pie.Width = 100;
pie.Height = 75;
pie.StartAngle = 30;
pie.EndAngle = 80;
pie.Angle = 15;
```

[VB]

```
Dim pie As Siberix.Report.Shapes.IPie = site.Shapes.AddPie()
pie.Pen = New Siberix.Graphics.Pen(Siberix.Graphics.Colors.Red, 3)
pie.Brush = Siberix.Graphics.Brushes.Yellow
pie.X = 50
pie.Y = 10
pie.Width = 100
pie.Height = 75
pie.StartAngle = 30
pie.EndAngle = 80
pie.Angle = 15
```

[XML]

```
<Pie X="50" Y="10" Width="100" Height="75" StartAngle="30" EndAngle="80" Angle="15" Pen="Red, 3" Brush="Yellow" />
```

Path

Represents a path.

```
<Path>
   <Pen />
   <Brush />

   <MoveTo
      X="Float value"
      Y="Float value"
   />
   <LineTo
      X="Float value"
      Y="Float value"
   />
   <CurveTo
      X1="Float value"
      Y1="Float value"
      X2="Float value"
      Y2="Float value"
      X3="Float value"
      Y3="Float value"
   />
   <ClosePath />
</Path>
```

Examples

[CS]

```
Siberix.Report.Shapes.IPath path = site.Shapes.AddPath();
```

```
path.Pen = new Siberix.Graphics.Pen(Siberix.Graphics.Colors.DarkBlue, 5, Siberix.Graphics.DashStyle.DashDotDot);
path.Brush = Siberix.Graphics.Brushes.Yellow;
path.MoveTo(100, 400);
path.LineTo(300, 500);
path.CurveTo(120, 560, 100, 520, 70, 480);
path.CurveTo(320, 360, 200, 320, 150, 600);
path.ClosePath();
```

[VB]

```
Dim path As Siberix.Report.Shapes.IPath = site.Shapes.AddPath()
path.Pen = New Siberix.Graphics.Pen(Siberix.Graphics.Colors.DarkBlue, 5, Siberix.Graphics.DashStyle.DashDotDot)
path.Brush = Siberix.Graphics.Brushes.Yellow
path.MoveTo(100, 400)
path.LineTo(300, 500)
path.CurveTo(120, 560, 100, 520, 70, 480)
path.CurveTo(320, 360, 200, 320, 150, 600)
path.ClosePath()
```

[XML]

```
<Path>
   <Pen Color="DarkBlue" Width="5" Style="DashDotDot" />
   <Brush Type="SolidColor" Color="Yellow" />
   <MoveTo X="100" Y="400" />
   <LineTo X="300" Y="500" />
   <CurveTo X1="120" Y1="560" X2="100" Y2="520" X3="70" Y3="480" />
   <CurveTo X1="320" Y1="360" X2="200" Y2="320" X3="150" Y3="600" />
   <ClosePath />
</Path>
```

Canvas

Represents a canvas element. This element allows to perform format independent graphical output. You can draw lines, rectangles, ellipses, polylines, arcs, pies and other complex curves and shapes, output text strings and images, perform various transformations and clipping.

```
<Canvas
   Id="String value"
   DataContext="String value"
   Width="Float value [%]"
   Height="Float value [%]"
   KeepWithNext="True | False"
>
   <Spacings />
   <Font />
   <ResetFont />
   <Brush />
   <ResetBrush />
   <Pen />
   <ResetPen />
   <CharSpacing
      Value="Float value"
   />
   <AlternateFill
      Value="True | False"
   />
```

```
<SaveClip
   X="Float value"
   Y="Float value"
   Width="Float value"
   Height="Float value"
/>
<RestoreClip />
<SaveState />
<RestoreState />
<Transform
   M11="Float value"
   M12="Float value"
   M21="Float value"
   M22="Float value"
   OffsetX="Float value"
   OffsetY="Float value"
/>
<StartHyperlink
   Reference="String value"
/>
<StartHyperlink
   PageIndex="Integer value"
   X="Float value"
   Y="Float value"
/>
<EndHyperlink />
<HyperlinkArea
   X="Float value"
   Y="Float value"
   Width="Float value"
   Height="Float value"
/>
<String
   Text="String value"
   X="Float value"
   Y="Float value"
/>
<Rectangle
   X="Float value"
   Y="Float value"
   Width="Float value"
   Height="Float value"
   Mode="Fill | Stroke | FillStroke | Clip"
/>
<RoundRect
   X="Float value"
   Y="Float value"
```

```
    Width="Float value"
    Height="Float value"
    EW="Float value"
    EH="Float value"
    Mode="Fill | Stroke | FillStroke | Clip"
/>
<Line
    X1="Float value"
    Y1="Float value"
    X2="Float value"
    Y2="Float value"
/>
<Lines
    Points="Float value - X, Float value - Y ..."
/>
<Polygon
    Points="Float value - X, Float value - Y ..."
    Mode="Fill | Stroke | FillStroke | Clip"
/>
<Ellipse
    X="Float value"
    Y="Float value"
    Width="Float value"
    Height="Float value"
    Mode="Fill | Stroke | FillStroke | Clip"
/>
<Arc
    X="Float value"
    Y="Float value"
    Width="Float value"
    Height="Float value"
    StartAngle="Float value"
    EndAngle="Float value"
    Mode="Fill | Stroke | FillStroke | Clip"
/>
<Pie
    X="Float value"
    Y="Float value"
    Width="Float value"
    Height="Float value"
    StartAngle="Float value"
    EndAngle="Float value"
    Mode="Fill | Stroke | FillStroke | Clip"
/>
<Chord
    X="Float value"
    Y="Float value"
```

```
    Width="Float value"
    Height="Float value"
    StartAngle="Float value"
    EndAngle="Float value"
    Mode="Fill | Stroke | FillStroke | Clip"
/>
<Curve
    Points="Float value - X, Float value - Y ..."
    Tension="Float value"
/>
<ClosedCurve
    Points="Float value - X, Float value - Y ..."
    Tension="Float value"
    Mode="Fill | Stroke | FillStroke | Clip"
/>
<Bezier
    X1="Float value"
    Y1="Float value"
    X2="Float value"
    Y2="Float value"
    X3="Float value"
    Y3="Float value"
    X4="Float value"
    Y4="Float value"
/>
<Beziers
    Points="Float value - X, Float value - Y ..."
    Mode="Fill | Stroke | FillStroke | Clip"
/>
<StartShape
    Mode="Fill | Stroke | FillStroke | Clip"
/>
<MoveTo
    X="Float value"
    Y="Float value"
/>
<LineTo
    X="Float value"
    Y="Float value"
/>
<CurveTo
    X1="Float value"
    Y1="Float value"
    X2="Float value"
    Y2="Float value"
    X3="Float value"
    Y3="Float value"
```

```
    />
    <ClosePath />
    <EndShape />
    <Image
        Source="File path or reference to embedded image"
        X="Float value"
        Y="Float value"
        Width="Float value"
        Height="Float value"
    />
    <Injector
        Id="String value"
    />
    ...
</Canvas>
```

Examples

```
[CS]

Siberix.Report.ICanvas canvas = section.AddCanvas();
canvas.Spacings.All = 10;

// Rectangle
canvas.Pen = new Siberix.Graphics.Pen(Siberix.Graphics.Colors.Red, 5);
canvas.Brush = new Siberix.Graphics.SolidColorBrush(new Siberix.Graphics.Color(255, 240, 240));
canvas.DrawRectangle(50, 50, 150, 100, Siberix.Graphics.PaintMode.FillStroke);

// String
canvas.Font = new Siberix.Graphics.Font(font2, 18);
canvas.Brush = Siberix.Graphics.Brushes.BlueViolet;
canvas.DrawString(70, 90, "Text string...");

// Line
canvas.Pen = new Siberix.Graphics.Pen(Siberix.Graphics.Colors.Green, 5);
canvas.DrawLine(220, 50, 320, 150);

// Ellipse
canvas.Pen = new Siberix.Graphics.Pen(Siberix.Graphics.Colors.Blue, 5);
canvas.Brush = new Siberix.Graphics.SolidColorBrush(new Siberix.Graphics.Color(240, 240, 255));
canvas.DrawEllipse(340, 50, 150, 100, Siberix.Graphics.PaintMode.FillStroke);

// Path
canvas.Pen = new Siberix.Graphics.Pen(Siberix.Graphics.Colors.DarkBlue, 5, Siberix.Graphics.DashStyle.DashDot);
canvas.Brush = new Siberix.Graphics.LinearGradientBrush(Siberix.Graphics.Colors.Yellow, Siberix.Graphics.Colors.Green, 45F);
canvas.StartShape(Siberix.Graphics.PaintMode.FillStroke);
canvas.FillRectangle(120, 200, 200, 200);
canvas.DrawEllipse(220, 250, 200, 200);
canvas.EndShape();

// Image
canvas.DrawImage(new Siberix.Graphics.Image("image1"), 400, 200, 150, 100);

[VB]

Dim canvas As Siberix.Report.ICanvas = section.AddCanvas()
canvas.Spacings.All = 10

' Rectangle
canvas.Pen = New Siberix.Graphics.Pen(Siberix.Graphics.Colors.Red, 5)
canvas.Brush = New Siberix.Graphics.SolidColorBrush(New Siberix.Graphics.Color(255, 240, 240))
canvas.DrawRectangle(50, 50, 150, 100, Siberix.Graphics.PaintMode.FillStroke)

' String
```

```
canvas.Font = New Siberix.Graphics.Font(font2, 18)
canvas.Brush = Siberix.Graphics.Brushes.BlueViolet
canvas.DrawString(70, 90, "Text string...")

' Line
canvas.Pen = New Siberix.Graphics.Pen(Siberix.Graphics.Colors.Green, 5)
canvas.DrawLine(220, 50, 320, 150)

' Ellipse
canvas.Pen = New Siberix.Graphics.Pen(Siberix.Graphics.Colors.Blue, 5)
canvas.Brush = New Siberix.Graphics.SolidColorBrush(New Siberix.Graphics.Color(240, 240, 255))
canvas.DrawEllipse(340, 50, 150, 100, Siberix.Graphics.PaintMode.FillStroke)

' Path
canvas.Pen = New Siberix.Graphics.Pen(Siberix.Graphics.Colors.DarkBlue, 5, Siberix.Graphics.DashStyle.DashDot)
canvas.Brush = New Siberix.Graphics.LinearGradientBrush(Siberix.Graphics.Colors.Yellow, Siberix.Graphics.Colors.Green, 45F)
canvas.StartShape(Siberix.Graphics.PaintMode.FillStroke)
canvas.FillRectangle(120, 200, 200, 200)
canvas.DrawEllipse(220, 250, 200, 200)
canvas.EndShape()

' Image
canvas.DrawImage(New Siberix.Graphics.Image("image1"), 400, 200, 150, 100)
```

[XML]

```
<Canvas Spacings="10">
    <Pen Color="Red" Width="5" />
    <Brush Type="SolidColor" Color="#FFFFF0F0" />
    <Rectangle X="50" Y="50" Width="150" Height="100" Mode="FillStroke" />
    <Font Source="font2" Size="18" />
    <Brush Type="SolidColor" Color="BlueViolet" />
    <String X="70" Y="90" Text="Text string..." />
    <Pen Color="Green" Width="5" />
    <Line X1="220" Y1="50" X2="320" Y2="150" />
    <Pen Color="Blue" Width="5" />
    <Brush Type="SolidColor" Color="#FFF0F0FF" />
    <Ellipse X="340" Y="50" Width="150" Height="100" Mode="FillStroke" />
    <Pen Color="DarkBlue" Width="5" Style="DashDot" />
    <Brush Type="LinearGradient" Angle="45" StartColor="Yellow" EndColor="Green" />
    <StartShape Mode="FillStroke" />
    <Rectangle X="120" Y="200" Width="200" Height="200" Mode="Fill" />
    <Ellipse X="220" Y="250" Width="200" Height="200" Mode="Stroke" />
    <EndShape />
    <Image Source="image1" X="400" Y="200" Width="150" Height="100" />
</Canvas>
```

PageNumber

Represents a page number element.

```
<PageNumber
    Id="String value"
    DataContext="String value"
    Style="Style reference"
    Template="String value : {0} Current page in the report, {1} Total pages in the report, {2} Current page in the section, {3} Total pages in the section"
    Format="Decimal | SmallLetters | BigLetters | SmallRoman | BigRoman"
    Alignment="Left | Center | Right"
/>
    <Spacings />
</PageNumber>
```

Examples

```
[CS]

Siberix.Report.IPageNumber pn = section.AddPageNumber();
pn.Style = style1;
pn.Template = "Page {0} of {1}";
pn.Alignment = Siberix.Report.NumberAlignment.Center;
pn.Spacings.All = 10;

[VB]

Dim pn As Siberix.Report.IPageNumber = section.AddPageNumber()
pn.Style = style1
pn.Template = "Page {0} of {1}"
pn.Alignment = Siberix.Report.NumberAlignment.Center
pn.Spacings.All = 10

[XML]

<PageNumber Style="Style1" Template="Page {0} of {1}" Alignment="Center" Spacings="10" />
```

PageReference

Represents a page reference element. You can use it to output the target page number of some other element.

```
<PageReference
    Id="String value"
    DataContext="String value"
    Style="Style reference"
    Template="String value : {0} Current page in the report, {1} Total pages in the report, {2} Current page in the section, {3} Total pages in the section"
    Format="Decimal | SmallLetters | BigLetters | SmallRoman | BigRoman"
    Alignment="Left | Center | Right"
/>
    <Spacings />
</PageReference>
```

Examples

```
[CS]

Siberix.Report.IPageReference pr = section.AddPageReference("text1");
pr.Style = style1;
pr.Template = "{0}";
pr.Format = Siberix.Report.NumberFormat.SmallLetters;
pr.Alignment = Siberix.Report.NumberAlignment.Left;

[VB]

Dim pr As Siberix.Report.IPageReference = section.AddPageReference("text1")
pr.Style = style1
pr.Template = "{0}"
pr.Format = Siberix.Report.NumberFormat.SmallLetters
pr.Alignment = Siberix.Report.NumberAlignment.Left

[XML]

<PageReference Reference="text1" Style="Style1" Template="{0}" Format="SmallLetters" Alignment="Left" />
```

PageBreak

Represents a page break element.

<PageBreak />

Examples

[CS]

```
section.AddPageBreak();
```

[VB]

```
section.AddPageBreak()
```

[XML]

```
<PageBreak />
```

Callback Interface

Siberix Report Writer for Silverlight exposes several methods to extend XML patterns with API calls.

XML input

```
<?xml version="1.0"?>
<Report>
   <Styles>
      <Style Id="Style1" Font="font1, 10" Brush="Black" />
   </Styles>
   <Sections>
      <Section Size="Letter" Spacings="20">
         <Text Style="Style1">Company: <MergeCode Id="Company" /></Text>
         <Group Borders="Black" Spacings="5" Paddings="5">
            <Background Color="Green" Drawing="Drawing1" />
            <Injector Id="Group1" />
         </Group>
         <Text Style="ExternalStyle1">External Text Style</Text>
         <Image Source="Image1" Width="200" />
      </Section>
   </Sections>
</Report>
```

Implementation

```
Siberix.Report.Report report = new Siberix.Report.Report();

report.Callback = new Callback();

report.Load(xml stream);

report.Publish(output stream, Siberix.Report.FileFormat.PDF);

[Siberix.Report.ICallback]

public class Callback : Siberix.Report.ICallback
{
   public string OnMergeCode(string id)
   {
      if (string.IsNullOrEmpty(id))
         return null;

      if (id.Equals("Company"))
         return "Siberix Technologies";

      return "";
   }

   public void OnInjector(string id, Siberix.Report.Text.IText text, Siberix.Report.Text.Style style, Siberix.Report.Text.Hyperlink
hyperlink)
   {

   }

   public void OnInjector(string id, Siberix.Report.IElement elemen)
   {
      if (string.IsNullOrEmpty(id))
         return;

      if (element == null)
         return;

      if ((element.Type == Siberix.Report.ElementType.Group) && id.Equals("Group1"))
      {
         Siberix.Report.IGroup group = (Siberix.Report.IGroup)element;

         group.Background.Brush = Siberix.Graphics.Brushes.LightYellow;
```

```
            Siberix.Report.Text.Style style = new Siberix.Report.Text.Style(new Siberix.Graphics.Font(font1, 12),
Siberix.Graphics.Brushes.Red);

            Siberix.Report.Text.IText text = group.AddText();
            text.Style = style;
            text.AddContent("Group Injector");
        }
    }

    public Siberix.Report.Text.Style GetStyle(string id)
    {
        if (string.IsNullOrEmpty(id))
            return null;

        if (id.Equals("ExternalStyle1"))
            return new Siberix.Report.Text.Style(new Siberix.Graphics.Font(font2, 30), Siberix.Graphics.Brushes.Red);

        return null;
    }

    public Stream GetFont(string source)
    {
        return null;
    }

    public Stream GetImage(string source)
    {
        if (string.IsNullOrEmpty(source))
            return null;

        if (source.Equals("Image1"))
            return GetCompanyLogoAsMemoryStream();

        return null;
    }

    public Siberix.Report.IDrawing OnDrawing(string id)
    {
        if (string.IsNullOrEmpty(id))
            return null;

        if (id.Equals("Drawing1"))
            return new CustomDrawing();

        return null;
    }

    public void OnLoadEnd(Report.IElement element)
    {

    }

    public void OnLoadStart(Report.IElement element)
    {

    }
}
```

```
[Siberix.Report.IDrawing]

public class CustomDrawing : Siberix.Report.IDrawing
{
   public string Id
   {
      get
      {
         return "Drawing1";
      }
   }

   public void OnDraw(Siberix.Graphics.IGraphics graphics, float x, float y, float width, float height)
   {
      graphics.Pen = new Siberix.Graphics.Pen(Siberix.Graphics.Colors.Red, 5);

      graphics.DrawLine(x, y, x + width, y + height);
   }
}
```

Delegates

Siberix Report Writer for Silverlight provides several delegates to combine XML patterns and API calls:

- Siberix.Report.Text.Style GetStyleDelegate(string id)
- System.IO.Stream GetFontDelegate(string source)
- System.IO.Stream GetImageDelegate(string source)
- Siberix.Report.IDrawing OnDrawingDelegate(string id)
- string OnMergeCodeDelegate(string id)
- void OnTextInjectorDelegate(string id, Siberix.Report.Text.IText text, Siberix.Report.Text.Style style, Siberix.Report.Text.Hyperlink hyperlink)
- void OnInjectorDelegate(string id, Siberix.Report.IElement element)
- void OnLoadStartDelegate(Siberix.Report.IElement element)
- void OnLoadEndDelegate(Siberix.Report.IElement element)
- Siberix.Report.Data.IDataContext GetDataContextDelegate(string id)
- Siberix.Report.Data.IValueFormatter GetValueFormatterDelegate(string id)
- Siberix.Report.Data.ITemplateSelector GetTemplateSelectorDelegate(string id)

Examples

```
report.Delegates.GetTemplateSelectorDelegate = delegate(string id)
{
    if (id == ts1.Id)
        return ts1;

    return null;
};
```